River and station	Flood stage	Above flood stages—dates From—	Above flood stages—dates To—	Crest Stage	Crest Date
Mississippi drainage—Continued					
Illinois:	*Feet*			*Feet*	
Morris, Ill.	13	(1)	1	14.4	Apr. 30
		21	29	17.9	May 25
Peru, Ill.	14	(1)	(2)	23.2	Apr. 21
				22.8	May 26
Henry, Ill.	10	(1)	(2)	17.9	Apr. 23–24
				17.4	May 28
Peoria, Ill.	18	(1)	(2)	24.6	Apr. 23–24
				23.9	May 28
Havana, Ill.	14	(1)	(2)	22.3	Apr. 26
				21.4	May 30–31
Beardstown, Ill.	14	(1)	(2)	25.2	Apr. 26
Pearl, Ill.	12	(1)	(2)	22.7	26–27
Meramec:					
Steelville, Mo.	12	25	25	17.7	May 25
Pacific, Mo.	11	26	29	18.3	27
		31	(2)		
Valley Park, Mo.	14	10	10	15.6	10
		26	(2)	21.0	28
St. Francis:					
St. Francis, Ark.	17	(1)	(2)	26.4	Apr. 18
Marked Tree, Ark.	17	(1)	(2)	20.1	May 10
Missouri:					
Pierre, S. Dak.	13	10	10	14.7	10
Chamberlain, S. Dak.	14	11	11	15.0	11
Yankton, S. Dak.	12	11	13	13.5	12
Blair, Nebr.	16	12	17	19.2	14
Omaha, Nebr.	19	14	16	19.9	15
St. Joseph, Mo.	12	16	17	12.1	16
Hermann, Mo.	21	10	10	21.3	10
St. Charles, Mo.	25	9	11	27.1	10
Floyd: Merrill, Iowa.	13				
Arkansas:					
Pine Bluff, Ark.	25	(1)	3	32.4	Apr. 21
Yancopin, Ark.	29	(1)	(2)	48.5	20
Neosho: Oswego, Kans.	17	8	10	17.6	May 8
Cottonwood: Emporia, Kans.	20	8	10	22.7	9
White:					
Georgetown, Ark.	22	(1)	4	30.3	Apr. 17
Clarendon, Ark.	30	(1)	12	43.3	23
Black:					
Leeper, Mo.	11	25	25	11.9	May 25
Williamsville, Mo.	11			14.5	25
Poplar Bluff, Mo.	14	7	8	14.5	7
		26	28	17.2	27
Corning, Ark.	11	(1)	(2)	16.2	Apr. 18
Petit Jean: Danville, Ark.	20	11	11	20.3	May 11
		21	21	20.3	21
Cache: Patterson, Ark.	9	(1)	8	16.0	Apr. 19
		18	19	9.0	May 18–19
Yazoo: Yazoo City, Miss.	25	(1)	(2)	37.4	5
Tallahatchie: Swan Lake, Miss.	25	(1)	(2)	31.8	Mar. 22
				31.1	Apr. 26–May 1
Red:					
Fulton, Ark.	28	(1)	1	35.0	Apr. 24
Springbank, Ark.	37	(1)	2	30.2	27–28
Ouachita: Monroe, La.	40	(1)	(2)	48.2	May 4
Atchafalaya:					
Melville, La.	37	(1)	(2)	46.8	14–16
Morgan City, La.	8	26	(2)		
West Gulf drainage					
Sabine: Logansport, La.	25	(1)	7	29.2	Apr. 19
Trinity:					
Dallas, Tex.	25	(1)	1	33.1	21
		9	9	26.4	May 9
Trinidad, Tex.	28	(1)	6	36.7	Apr. 29
Liberty, Tex.	25	(1)	11	27.4	21
Rio Grande: San Marcial, N. Mex.	2	(1)	(2)	3.8	May 9, 10, 21
Pacific drainage					
Colorado:					
Fruita, Colo.	12	19	23	12.2	19–21
Topock, Ariz.				19.6	27
Parker, Ariz.	7	1	(2)	10.0	28
Gunnison: Delta, Colo.	9	(1)	8	9.9	1
		14	28	10.8	17–18
Gunnison, North Fork: Paonia, Colo.	9	(1)	(2)		
		18	21	9.1	18
San Joaquin: Friant, Calif.	12	14	18	12.9	17
Kings, Piedra, Calif.	12	5	5	12.0	5
		14	19	13.3	17
Columbia: Vancouver, Wash.	15	20	24	16.2	21–22
		28	(2)		
Williamette: Portland, Oreg.	15	20	(2)		
Clearwater: Kamiah, Idaho	14	17	17	14.6	17

[1] Continued from last month.
[2] Continued at end of month.
[3] Below flood stage at 8 a. m. May 1, 1927.

MEAN LAKE LEVELS DURING MAY, 1927

By UNITED STATES LAKE SURVEY

[Detroit, Mich., June 4, 1927]

The following data are reported in the Notice to Mariners of the above date:

Data	Lakes[1] Superior	Michigan and Huron	Erie	Ontario
Mean level during May, 1927:	*Feet*	*Feet*	*Feet*	*Feet*
Above mean sea level at New York	601.96	579.14	571.95	245.95
Above or below—				
Mean stage of April, 1927	+0.55	+0.36	+0.20	−0.02
Mean stage of May, 1926	+1.78	+0.98	+0.78	+0.58
Average stage for May, last 10 years	+0.32	−0.99	−0.39	−0.30
Highest recorded May stage	−1.09	−4.38	−2.47	−3.09
Lowest recorded May stage	+1.78	+0.98	+0.78	+0.99
Average departure (since 1860) of the May level from the April level	+0.31	+0.30	+0.34	+0.33

[1] Lake St. Clair's level: In May, 1927, 574.40 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, MAY, 1927

By J. B. KINCER

General summary.—During the first decade rains interrupted field work in most of the interior valley States, although considerable was accomplished the first part. Lowlands continued too wet for good growth of crops, with further complaint of grains yellowing, while conditions in the Northwest were rather unfavorable. In the central and southern Great Plains the weather was rather favorable, and in the South mostly ideal conditions prevailed for field work; but it continued too dry in the Southeast and in parts of the Southwest, with a general, soaking rain needed in the former area and in parts of Texas, Oklahoma, and sections to the westward. There was further delay to field work during the second decade, due to wet soil and further rainfall, and spring planting was much behind an average season in much of the Ohio Valley and central Mississippi areas. Vegetation made slow progress, due to cool weather, in the East, but good advance was reported in the West wherever there was sufficient soil moisture. A continuation of rains kept the soil too wet for working in the Ohio and middle Mississippi Valleys during the latter part of the month, and the continued absence of rain in the Southeast and Southwest was unfavorable, with moisture urgently needed in much of these areas.

Small grains.—It was rather unfavorable for wheat during the first part of the month. The winter crop continued to make fair to very good progress in some sections, but further rains were detrimental in many interior valley districts, especially on lowlands, and there were further complaints of yellowing. Little seeding could be accomplished in the Spring Wheat Belt, but the early seeded grain made satisfactory progress. Winter wheat continued to make good to excellent advance in most of the Great Plains during the second decade, but was poor in Oklahoma due to rust, insect infestation, and scanty

moisture, while drought was damaging in western Kansas. Further deterioration continued in these sections during the latter part of the month, but elsewhere the crop made mostly fair to very good progress. Harvest advanced in Texas and at the close of the month wheat was heading as far north as Pennsylvania. Oats did well during most of the month, except in some interior wet sections. Conditions were favorable for rice generally and flax seeding progressed fairly well, except for some local interruption by rain.

Corn.—Considerable corn planting was accomplished in the Ohio Valley States during the first part of the month, but rains interrupted this work toward the close of the first decade. Planting made very good progress in many sections of the upper Mississippi Valley, but was much behind an average season. Seeding was slow and very backward and had become seriously delayed in most of the Ohio Valley States at the close of the month. It made generally good advance in the Great Plains area, with cultivation progressing in southern sections.

Cotton.—Planting cotton advanced well generally, except in some central-northern portions of the belt and in the inundated sections, although planting was progressing on some of the higher ground in the previously overflowed territory at the close. The continued absence of rain in the eastern portion of the belt was generally unfavorable and resulted in rather poor germination and slow progress of the planted crop. Progress and condition of cotton were rather poor in Texas during the first half with deterioration in the drier sections, but conditions were more favorable during the latter half, with progress ranging from fair to very good; the condition of the crop varied greatly, from poor to very good. The early planted stood the drought well, but late planted in the drier districts deteriorated, with germination poor in the west and north. Growth was fair to good in most other sections, and the crop was clean and generally well cultivated.

Ranges, pastures, and livestock.—Continued dry weather was unfavorable in the Southwest and caused some deterioration, especially in New Mexico and adjacent sections, where the range was barren in many parts. Generally good to excellent condition of the range prevailed in most of the Great Plains area and pastures were uniformly good in the East, except in the Southeast, where it was too dry. Some livestock losses occurred from stormy weather and the poor range caused much to be shipped out in New Mexico, but elsewhere livestock were generally good.

Miscellaneous crops.—Potato planting progressed to the northern border States, but this work was retarded the latter part of the month by continued rains or wet soil. Progress of potatoes was generally good in most sections where up, but sweet-potato transplanting was delayed in the Southeast by continued dry weather. Minor crops suffered from lack of moisture in most sections from Florida northward to North Carolina and condition in this area was poor, with much truck reported a failure on the Florida uplands. In most other sections of the country truck made generally good advance. Tobacco was affected by the drought in Florida and continued wet soil in Kentucky made conditions unfavorable for transplanting. Sugar-beet seeding was finished in Wyoming, with the early crops being thinned, and elsewhere they were growing well.

Fruits were generally good in most northern sections, although the early crop was showing the effects of the April freeze. Citrus continued to drop badly in Florida during most of the month due to continued absence of moisture, but this crop did well in California.

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The number of gales reported during May was not far from the normal shown on the Pilot Chart over the greater part of the steamer lanes, where in different 5° squares they were observed on from two to four days. Moderate conditions were the rule off both the American and European coasts, with the exception of a few days. In the region between the thirtieth and thirty-fifth parallels and the twenty-fifth and sixty-fifth meridians the number of days with heavy weather was somewhat in excess of the normal.

May was an exceptionally foggy month, especially over the Grand Banks and off the American coast, as fog was reported on 18 days in the former locality and on from 14 to 15 in the latter. There was also more fog than usual over the eastern section of the steamer lanes, where it occurred on from 3 to 9 days.

The results for Julianehaab, Greenland, were not given in the following table, as reports were missing on 10 days. Judging from data on hand there was a period of high pressure from the 13th to 15th, with a barometric reading of 30.12 inches on the former date; cyclonic conditions prevailed on the 21st, when a reading of 29.53 inches was recorded; the reports for the 22d and 23d are missing.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure at sea level, 8 a. m. (seventy-fifth meridian), North Atlantic Ocean, May, 1927*

Stations	Average pressure	Departure [1]	Highest	Date	Lowest	Date
	Inches	*Inch*	*Inches*		*Inches*	
Belle Isle, Newfoundland	29.83	−0.11	30.20	5th.	29.48	9th.
Halifax	29.92	−0.08	30.44	22d.	29.48	26th.
Nantucket	29.92	−0.09	30.46	22d.	29.50	27th.
Hatteras	29.98	−0.03	30.36	22d.	29.76	16th.
Key West	30.02	+0.04	30.14	31st.	29.90	1st.[2]
New Orleans	30.01	+0.05	30.18	31st.	29.84	28th.
Swan Island	29.88	+0.01	29.98	[2] 23d.	29.80	2d.
Turks Island	30.07	+0.07	30.14	13th.	29.96	28th.
Bermuda	30.08	+0.08	30.30	[2] 10th.	29.86	28th.
Horta, Azores	30.06	−0.08	30.32	9th.	29.78	18th.
Lerwick, Shetland Islands	30.02	+0.22	30.48	10th.	29.57	21st.
Valencia, Ireland	30.06	+0.11	30.42	11th.	29.54	2d.
London	30.05	+0.13	30.42	11th.	29.66	31st.

[1] From normals shown on H. O. Pilot Chart, based on observations at Greenwich mean noon, or 7 a. m., seventy-fifth meridian.
[2] And on other dates.

On the 1st a disturbance of limited extent was central near Hatteras, and moderate to strong northerly gales prevailed in that vicinity. On the 1st there was also a depression central near 50° N., 35° W., that afterwards increased considerably in intensity. The western LOW moved northeastward along the coast, and on the 2d the center was near Sydney, Nova Scotia. The eastern